Time-frequency domain and spectrogram distribution for human motion and movement behaviour analysis

Abstract :

This study investigates and acts as a trial clinical outcome for human motion and behaviour analysis in consensus of health related quality of life in Malaysia. It was developed to analyse and access the quality of human motion that can be used in hospitals, clinics and human motion researches. It aims to establish how widespread the quality of life effects of human motion. Reliability and validity are needed that can help facilitate subject outcomes. An experiment was set up in a laboratory environment with conjunction of analysing human motion and its behaviour. The instruments demonstrate adequate internal consistency of optimum window length (n) in sampling human motion signals from gyroscope (n=16), accelerometer (n=16) and compass (n=8) signals. A simple system for time-domain signal to frequency-domain signal conversion and spectrogram was developed to demonstrate the results.